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American Petroleum Institute
1220 L Street, Northwest
Washington, D.C. 20005

Monthly Statistical Report

Prepared by the Finance, Accounting, and Statistics Department

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SUMMARY

Contrasting with relatively flat performance in March, April's total deliveries resumed the pattern of year-to-year declines evident since last September. The month's drop of 3.3 percent reflected declines for all major products except gasoline. Even that product's marginal, 0.4 percent increase was most likely not paralleled by a gain in actual consumption, which we believe continued to decline in April. For deliveries as a whole, the month's decrease corresponded reasonably closely with the 2 to 3 percent decline trend estimated for underlying consumption.

April's product imports, for the first time since last July, reached 2 million B/D. With the improving availability of products over the last month or two with respect to at least some of the problems that had hindered international product trade—the lack of product exports from Kuwait following last August's invasion, a surge in military demand related to the Persian Gulf crisis, strong weather-related demand in Europe early in 1991, and temporary interruptions in supplies from Latin American refineries—product imports in April were essentially equal to those of a year ago. This contrasts with an average year-to-year decline between September and March of 24 percent or more than half a million B/D.

Total imports, though still down about 4 percent versus a year ago in April, reached their highest level since last August. This was largely the reflection of a shift in domestic inventory patterns rather than in underlying consumption or production trends. After a decline in total inventories of nearly 165 million barrels between last August and March, higher imports allowed total inventories to rise 17 million barrels in April.

Month-end gasoline stocks of 204 million barrels were at the bottom of their recent historical range, the result of the combination of diminished availability of product imports earlier in the year and the need to clear the distribution system for government-mandated summer grades before May 1. Crude oil stocks, however, at 340 million barrels, remained near the middle of their recent historical range. Utilization of reported refining capacity averaged 84.5 percent for April, essentially identical with the 84-85 percent levels observed in April for recent prior years—despite this year's decline in demand.

Domestic crude oil production again rose year to year in April, though, in part because of a slight decline in Alaskan output, the increase amounted to only about 0.6 percent or 40 thousand B/D. In the first quarter, domestic production had risen about 1 percent—the first year-to-year increase for a similar period in five years.

PRODUCT SUPPLIED [1]

Gasoline

DELIVERIES RISE BUT CONSUMPTION LIKELY DECLINES.

In contrast to the declines of recent prior months, gasoline deliveries increased slightly in April. However, for a number of reasons, the marginal 0.4 percent rise most likely overstated the strength of underlying consumption, which we believe continued to be down. April's retail prices, up slightly from March, were still lower than they had been for much of the prior eight months. But it is highly unlikely, with the current feeble economy, that the weakness in gasoline deliveries—whose year-to-year declines had been uninterrupted for the previous seven months—was abruptly reversed.

Gasoline deliveries were already slipping, even before the economy began to weaken in the latter part of last year. For the first half of 1990, gasoline deliveries had fallen about 1 percent when the year-to-year growth in economic activity was still averaging 1.2 percent. By the fourth quarter, gasoline deliveries were falling at a 3 percent rate in response to higher retail prices as well as the weakening economy, which by then was up only half a percent, year to year. (When measured on a quarter-to-quarter, annualized basis, fourth quarter GNP fell 1.6 percent). For this year's first quarter, the annualized, quarter-to-quarter decline in GNP of 2.8 percent works out to a year-to-year falloff in economic activity of about 0.6 percent—and it is unlikely that conditions changed dramatically by April. Thus, despite lower retail prices than for most of the past two quarters, gasoline consumption would still be expected to have declined in April by around 2 percent.

For the month as a whole, retail gasoline prices averaged about 1 cent higher in April than in March, and are up around 6 cents over the last couple of months—slightly less than the increase in crude prices since they reached a low in late February. Normal

	API ESTIMATES APRIL		YEAR-TO-DATE	
	Million B/D	Percent Change	Million B/D	Percent Change
Total domestic deliveries	16.1	(3.3)	16.6	(1.9)
Crude production[2]	7.4	0.6	7.5	0.9
Total imports[3]	7.4	(4.4)	7.1	(14.6)
Stocks (million bbl)[4]	976	(7.6)	na	na

seasonal factors may have also played a part in this, since gasoline prices tend to increase as the summer driving season approaches. Analysis of recent years' data show a typical seasonal difference between winter and summer retail prices of roughly 7 cents per gallon, paralleling increased seasonal demand on refineries to produce gasoline at the expense of other products.

Distillates

DROPS FOR HEATING, TRANSPORTATION CUT CONSUMPTION. April's distillate deliveries dropped nearly 7 percent or over 200 thousand B/D from one year earlier, continuing the pattern of declines evident since last fall. The size of the decline probably overstated the drop in consumption, since for the year-to-date, the drop in deliveries has amounted to closer to 3 to 4 percent on a weather-adjusted basis.

The month's weather, though roughly 15 percent warmer than a year ago, explains perhaps only about 50 thousand B/D of the decline since, by April, the seasonal peak in heating-related consumption is well past. Declines in transportation activity contributed to lower demand for diesel fuel, both for on-highway and railroad uses. Highway demand for diesel is estimated to have fallen by about 2 percent during the month, with railroad demand falling more in the 7-9 percent range.

Railroad use of diesel, which accounts for approximately 7 percent of annual distillate fuel use, is particularly sensitive to conditions in mining and industrial sectors, which are subject to wider swings than the economy in general. Railroad car loadings of motor vehicles and parts dropped about 15 percent during the month, while loadings of coal (nearly two-fifths of all car loadings), dropped by about 10 percent.

Residual Fuel Oil

DECLINE MODERATING. Residual fuel deliveries fell in April for the seventh time in eight months. However, the 3.5 percent decline for the month, coupled with the modest growth during March, indicates a moderation in the underlying rate of decline. Temperate weather in the Northeast (where over half of the nation's resid-fired electricity generation takes place) worked against demand during April. However, that was balanced by below-trend deliveries a year ago, which kept the decline from being larger. Adjusting for these factors, we estimate underlying consumption declines to be in the 6-7 percent range.

Weather was the primary factor at work during April, as temperatures in New England and the Mid-Atlantic states fell 15 percent from already moderate temperatures a year ago. While the milder weather helped to bring total electricity output in these states down by about one percent, it likely had a more significant effect on resid-fired generation than on total generation.

Resid-fired electricity capacity is often used for meeting peak demand. While it accounts for about 15 percent of total generation in the Northeast on an annual basis (and about 4 percent nationwide), it makes up considerably more of the incremental output when weather gets extremely hot or cold. Consider, for example, the severe winter of 1989. Between November and December of that year, resid-fired generation accounted for about 60 percent of the marginal electricity output in the Northeast (and 22 percent of the surge output nationwide). However, just as its share grows when temperatures approach extremes, its share falls when temperatures moderate. It is therefore believed that resid-fired generation fell by more than the drop in total generation during April.

Resid prices fell during the month, both in absolute terms and relative to natural gas. At month's end, prices vis-a-vis gas were about as competitive as they've been since last July. Still, having gone through a moderate winter, and with moderate spring weather thus far, natural gas supplies are believed plentiful, and the customary seasonal switch from resid to natural gas does not appear to have been significantly deterred by the changing relative prices.

Kerosine Jet Fuel

DELIVERIES DROP SHARPLY. At 1.19 million B/D, April jet fuel deliveries were their lowest in almost two years; the 7.9 percent year-to-year decline for the month was unusually sharp. However, the April decline more likely reflects changing secondary inventories than a fall-off in underlying consumption.

Airline inventories had apparently been built during the first quarter, when growth in jet fuel deliveries had outpaced growth in underlying consumption by 7-8 percent. Over the long run, however, growth in jet fuel consumption tends to track growth in miles flown, although changes in average aircraft efficiency, size, and flight distance have combined to keep growth in jet fuel demand slightly below growth in miles flown. Between 1984 and 1990, jet fuel deliveries grew at an average annual rate of 5.4 percent while the number of miles flown grew by about 6 percent.

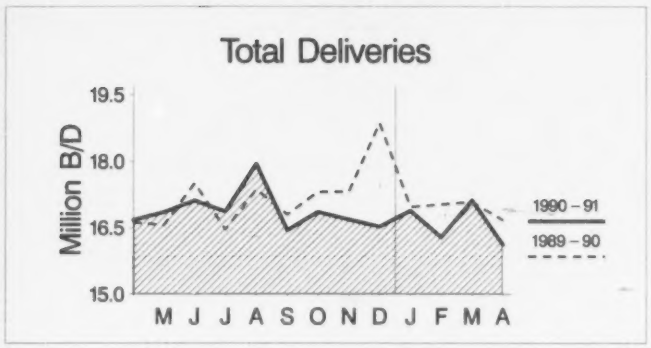
Monthly airline reports show relative improvements in traffic during April, as March's increase in bookings translated into gains in passenger travel. We estimate that, following the 4 percent drop in miles flown during the first quarter (believed, particularly on international routes, to have been more the result of the Persian Gulf conflict than the weak economy), travel in April was about the same as in that month a year ago.

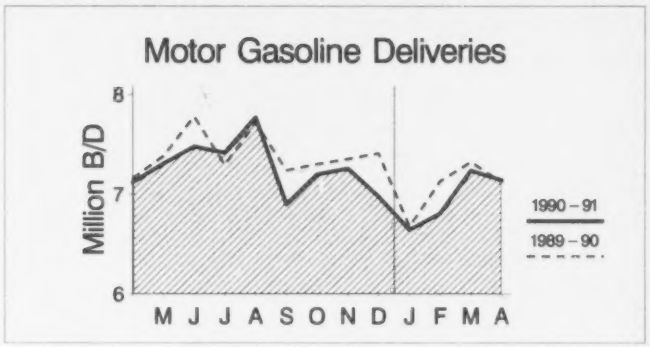
However, while war was the primary reason behind the dramatic drops in passenger travel during the first quarter, it is unlikely to have been the major reason behind weakness in air freight. This segment of the market, which accounts for about a quarter of ton-miles, had already shown signs of weakening even before the outbreak of hostilities in January. Cargo ton-miles had grown by an average annual rate of 11 percent from 1985 to 1989. In 1990, however, air cargo growth dropped to only about 2 percent, and declined moderately during the first four months of 1991, likely the result of economic conditions.

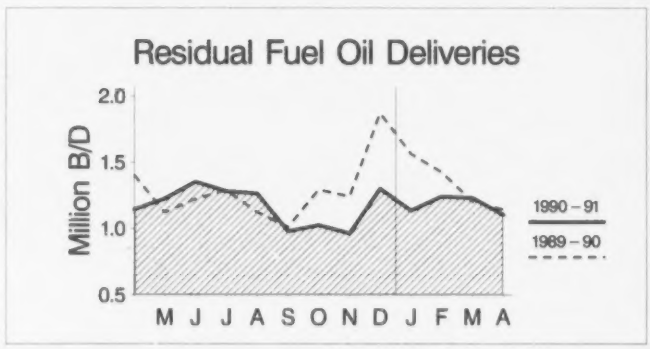
Other Oils

PRIOR MONTH'S RISE REVERSED. Reversing the prior month's increase, deliveries of "other oils" dropped 2.7 percent in April —though the underlying trend, we believe, continues to be flat.

The fact that deliveries of "other oils" have not paralleled total deliveries over the past year or two contrasts with longer-term trends, mainly reflecting gains for petrochemical feedstocks. Last year, total deliveries fell 2.4 percent while deliveries of "other oils" held steady. So far this year, while total deliveries have continued to trend downwards, deliveries of "other oils" rose 2.9 percent—and even if adjusted for unusually weak deliveries in the year-ago period, they would still have been only flat. But over the previous five years, for example, growth in deliveries of "other oils" nearly matched that of total deliveries. Average growth rates, respectively, were 1.1 and 1.2 percent per year.







SUPPLY [1]

Production

YEAR-TO-YEAR INCREASE CONTINUES. Domestic crude oil production continued to show year-to-year gains in April. The increase, however, was less than the first quarter's roughly 1 percent increase—which had been the first year-to-year increase for a similar period in five years. For the lower 48, April production rose 1.0 percent, or a little over 50 thousand B/D versus one year earlier. With a marginal slip in Alaskan output of 0.7 percent, production for the U.S. as a whole rose a little over 40 thousand B/D or 0.6 percent.

Imports

PRODUCT IMPORTS HIGHEST IN NINE MONTHS. Imports in April, at 7.4 million B/D, reached their highest monthly level since last August—though this largely reflected a shift in inventory behavior. A substantial domestic stock draw during August through March had temporarily replaced some imports, while, by contrast, April's higher imports allowed domestic inventories to rise by more than the typical seasonal amount. As a result of these shifts in inventory patterns, the year-to-year declines in imports, which had averaged 17 percent over the prior two quarters, amounted to only about 4 percent in April.

April's overall increase in imports reflected a significant strengthening for products, imports of which reached 2 million B/D for the first time since last July. Following the invasion of Kuwait by Iraq last August, a number of factors had reduced the availability of product imports on world markets: the loss of product output from Kuwait; increased military demand and redirection of Saudi product output to military uses; strong heating-related demand in Europe due to extremely cold weather in late January to mid-February; and, more recently, reduced gasoline availability from Latin America due to refinery downtime in Venezuela and labor unrest in Brazil.

In more recent months, however, Persian gulf military demand has evaporated, Saudi Arabian products are again being offered to world markets, and supplies have again become more readily available from Latin American producers. The year-to-year decline in product imports over September through March had amounted to about 24 percent or more than half a million B/D. For April, product imports were roughly even.

April's imports of finished gasoline rose 95 thousand B/D to 422 thousand B/D, the first year-to-year increase in nearly a year. Distillate imports of 253 thousand B/D, though still off about 55 thousand B/D from a year ago, were within the range that had been typical prior to the events of the last nine months. Kerosine jet fuel imports, reflecting in part April's weak deliveries, were still off by about 30 thousand B/D from a year ago at 71 thousand B/D.

Refinery Operations

ACTIVITY MATCHES YEAR-AGO LEVEL. As is usually the case, refinery activity picked up in April versus the prior month. Input to distillation units averaged 13.2 million B/D, up about 250 thousand B/D from March and, despite weaker demand, nearly equal to that of a year ago.

The month's utilization of reported capacity averaged 84.5 percent—and contrary to some reports, was essentially the same as the 84-85 percent level experienced in April for the last several years. The intensity of refinery activity normally lessens in early

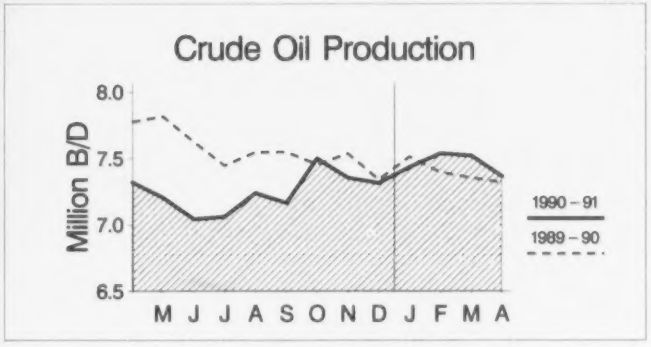
spring because of the need to undertake maintenance and repairs following the higher level of activity during the winter months, and in preparation for the upcoming peak demand period for gasoline. The apparent practical peak utilization rate for reported capacity, observed during the highest demand periods in recent years, has been in the low 90s. For capacity in actual operation (a figure slightly lower than "reported capacity"), April's utilization rate would have been about 88 percent.

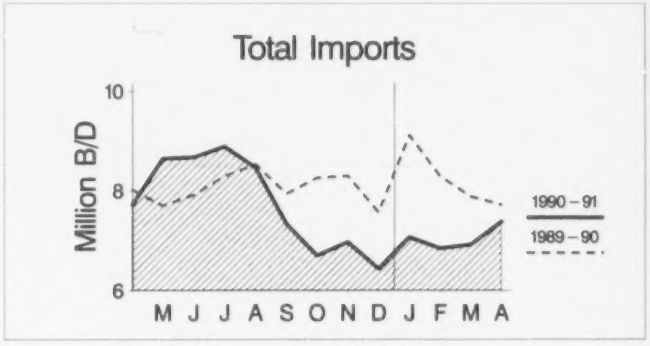
April's gasoline production declined 0.9 percent, year to year, following an increase of similar size for March. Distillate output was flat, while production of kerosine jet fuel and residual fuel oil rose 1.0 percent and 4.0 percent, respectively.

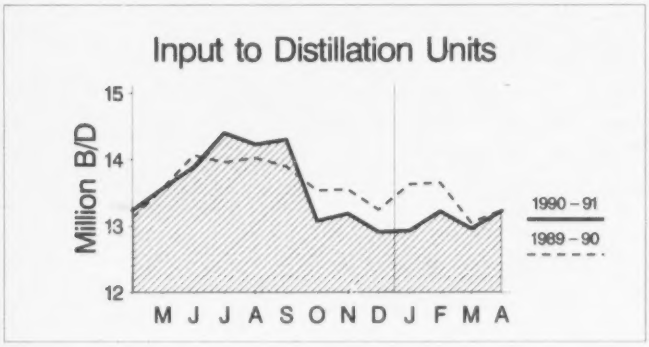
Inventories

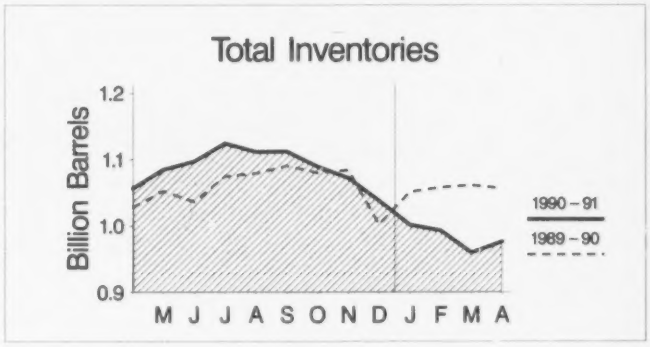
PRIOR DRAWDOWN REVERSES IN APRIL. Reversing the decline trend that had been evident since last August, total inventories rose 17 million barrels during April. From August to March, domestic inventories had been drawn down by nearly 165 million barrels largely to compensate for the reduced availability of imports following the Iraq-Kuwait crisis. At 976 million barrels, they were still 7.6 percent lower than a year ago.

Crude stocks, 340 million barrels at month-end, continued in roughly the middle of their historical range. Gasoline stocks declined 5 million barrels to 204 million barrels, continuing at the bottom of their recent historical range. The reduced availability of imports earlier in the year and the costliness of being caught with winter-grade gasoline—essentially unsalable after the May 1 regulatory deadline—contributed to April's low stock level. Distillate stocks, at 100 million barrels, remained slightly above the typical end-of-season levels of recent years.









1/ Total supply, i.e., production plus imports adjusted for net stock change is equal to total products supplied from primary storage. Total products supplied from primary storage less exports is equal to total domestic products supplied. Information contained in this report is derived from information published in the API Weekly Bulletin and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2/ Includes lease condensate.

3/ API data do not include crude oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR (according to the U.S. Department of Energy, the SPR held approximately 569 million barrels as of April 30, 1991).

ESTIMATED UNITED STATES PETROLEUM BALANCE
(Daily Average in Thousands of 42 Gallon barrels)

Products Supplied/Supply From Primary Storage	APRIL			YEAR-TO-DATE		
	1991[1]	1990[2]	% Change	1991[3R]	1990[2]	% Change
Products Supplied:						
Total motor gasoline	7,142	7,116	0.4	6,960	7,059	(1.4)
Finished leaded motor gasoline/*	260	420	(38.1)	256	434	(41.0)
Finished unleaded motor gasoline/*	6,882	6,696	2.8	6,704	6,625	1.2
Naphtha-jet	170	196	(13.3)	173	186	(7.0)
Kerosine-jet	1,190	1,292	(7.9)	1,301	1,296	0.4
Distillate fuel oil	2,850	3,059	(6.8)	3,091	3,187	(3.0)
Residual fuel oil	1,102	1,142	(3.5)	1,175	1,332	(11.8)
All other oils[4]	3,826	3,934	(2.7)	4,088	3,974	2.9
Reclassified[5]	-168	-73	130.1	-178	-99	79.8
Total domestic products supplied	16,112	16,666	(3.3)	16,610	16,935	(1.9)
Exports	949	761	24.7	1,189	793	49.9
Total products supplied	17,061	17,427	(2.1)	17,799	17,728	0.4
Supply:						
Domestic production:						
Crude oil[6]	7,362	7,318	0.6	7,463	7,393	0.9
Natural gas liquids	1,617	1,481	9.2	1,637	1,520	7.7
Other supply[7]	1,259	752	67.4	1,144	1,002	14.2
Total domestic supply	10,238	9,551	7.2	10,244	9,915	3.3
Imports:						
Crude oil, total[8]	5,378	5,702	(5.7)	5,341	5,958	(10.4)
Canadian	770	611	26.0	774	592	30.7
Other	4,608	5,091	(9.5)	4,567	5,366	(14.9)
Products, total	2,002	2,018	(0.8)	1,713	2,300	(25.5)
Residual fuel oil	404	555	(27.2)	398	583	(31.7)
Other	1,598	1,463	9.2	1,315	1,717	(23.4)
Total imports	7,380	7,720	(4.4)	7,054	8,258	(14.6)
Total supply	17,618	17,271	2.0	17,298	18,173	(4.8)
Stock change, all oils	557	-156	******	-501	445	******
Refinery Operations						
Input to crude oil distillation units	13,222	13,234	(0.1)	13,077	13,385	(2.3)
Operable capacity	15,654	15,496	1.0	15,660	15,516	0.9
Refinery utilization (%)[9]	84.5	85.4	(1.1)	83.5	86.3	(3.2)
Crude oil runs	13,079	13,051	0.2	12,930	13,225	(2.2)

Stocks (millions bbls.)	1991		1990[2]	% Change from	
	Apr. 30[10]	Mar. 31[10]	Apr. 30	Previous Month	Year Ago
Crude oil[8]	339.5	339.3	369.7	0.1	(8.2)
Unfinished oils	112.6	107.1	108.7	5.1	3.6
Total motor gasoline/**	204.3	209.3	223.6	(2.4)	(8.6)
Finished leaded motor gasoline/*	8.1	7.9	12.6	2.5	(35.7)
Finished unleaded motor gasoline/*	159.1	162.8	171.9	(2.3)	(7.4)
Naphtha-jet	5.8	5.8	6.3	0.0	(7.9)
Kerosine-jet	38.0	38.8	40.5	(2.1)	(6.2)
Distillate fuel oil	100.4	97.4	99.5	3.1	0.9
Residual fuel oil	44.0	43.8	49.0	0.5	(10.2)
All other oils	131.6	118.0R	159.2	11.5	(17.3)
Total all oils	976.2	959.5R	1,056.5	1.7	(7.6)

/1 Based on API estimated data converted to a monthly basis.
/2 Source: U.S. Department of Energy.
/3 JANUARY-FEBRUARY, DOE, MARCH-APRIL, API.
/4 Includes crude losses.
/5 Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from the total domestic products supplied.
/6 API estimate; includes lease condensate.
/7 Includes Unaccounted-for crude oil, which will reflect withdrawls from the SPR when they occur, processing gain, field production of other hydrocarbons and alcohol.
/8 Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.
/9 Represents "Input to crude oil distillation units" as a percent of "Operable capacity".
/10 Derived by interpolating API weekly stocks data.
/R Revised.
/* Included in motor gasoline.
/** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.